

NOTES & NEWS

Observations on Feeding in
Maxwellia santarosana (Dall)

(Gastropoda : Muricidae)

BY

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THE CARNIVOROUS SNAIL *Maxwellia santarosana* (Dall, 1905) ranges from Point Estero, California to San Bartolomé Bay, central Baja California, Mexico. It occurs on sublittoral rocky bottoms (McLean, 1978). On 14 April 1978 I collected one of these snails while SCUBA diving at a depth of 12 m off Blue Cavern Point, Santa Catalina Island, California. The snail was on a rocky reef covered with sessile invertebrates including the pelecypod *Chama arcana* Bernard, 1976. When placed into an aquarium containing *C. arcana*, the snail drilled holes into the shells of three of the pelecypods and consumed them.

Two more *Maxwellia santarosana* were collected at 10-12 m on rocky reefs off Abalone Cove, Palos Verdes Peninsula, Los Angeles County, California during April and June, 1979. These snails ignored live blue mussels (*Mytilus edulis* Linnaeus, 1758) in the aquarium in which they were kept. One of the snails, however, attacked a *Chama arcana*. The snail moved toward the pelecypod two days after the prey was placed in the tank. On the following day, the snail began drilling the lower valve, about 3 mm from the hinge. The snail continued to drill and feed for 9 additional days. On the 9th day, the shell opened, revealing an intact hinge but no tissue except for an adductor muscle and a strip of mantle. The remaining tissue was consumed by a scavenging sea urchin (*Lytichinus anamesus* Clark). The drill hole tapered from the outside inward, the outer diameter being 1.5 mm and the inner diameter less than 1 mm.

The feeding habits of *Maxwellia santarosana* have not been reported previously. However, *Maxwellia gemma* (Sowerby, 1879) can drill holes and consume clams. Like *M. santarosana*, this species does not break the hinge, but

eats the tissue through the hole. *Maxwellia gemma* takes only 4 days to eat a clam. Its drill hole is straight-sided, not tapered (WILLIAMS, 1976). The species of prey was not recorded. However, photographs accompanying the article show the prey to be a venerid clam, probably *Protothaca staminea* (Conrad, 1837). I conclude that both species of *Maxwellia* are predators on the pelecypods of rocky subtidal to low intertidal zones.

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Range Extension for

Pterotyphis fimbriatus (A. Adams, 1854)

BY

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DURING A COLLECTING TRIP to Costa Rica in July and August 1979 we found a fine but crabbed specimen of *Pterotyphis fimbriatus* (A. Adams, 1854) at Playa Jaco, Puntarenas Province, Costa Rica, intertidally among rocks.

KEEN (1971) as well as RADWIN & D'ATTILIO (1976) report this apparently rare species from the Central Mexican coast only: Barra de Navidad and Bahía Cuastecoma (Jalisco) and Sayulita (Nayarit).

The record of our specimen thus extends the known range approximately 10 degrees south.

ACKNOWLEDGMENT

We wish to thank Mr. H. Mühlhäusser, Freiburg, Western Germany, for examining the specimen.

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